

E UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Kelly, et al.

Group Art Unit: 3738

Serial No. 10/600,052

Examiner: Unknown

Filed: June 20, 2003

For: WEAR-RESISTANT ENDOPROSTHETIC DEVICES

INFORMATION DISCLOSURE STATEMENT

Commissioner For Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

In compliance with the duty of disclosure under 37 CFR §1.56, and in accordance with the practice under 37 CFR §1.97 and §1.98, the Examiner's attention is directed to the documents listed on the enclosed modified Form PTO-1449. No inference should be made that the cited references are in fact material, are in fact prior art, or that no better art exists. The cited patents are listed in numerical order and are not in any order based on their pertinence.

Pursuant to 37 CFR §1.98(d), no copies of the cited references are enclosed since the references were provided in the parent applications, U.S. Serial No. 09/923,891 and U.S. Serial No. 09/924,298.

The Commissioner is hereby authorized to charge any additional fees which may be required or credit any overpayment to Deposit Account 08-1394.

It is respectfully requested that the above information be considered by the Examiner and that a copy of the enclosed Form PTO-1449 be returned indicating that such information has been considered.

Respectfully submitted,

Andrew Lowes

Registration No. 40,706

Date: HAYNES AND BOONE. LLP 901 Main Street, Suite 3100 Dallas, Texas 75202-3789 Telephone: 972-680-7557

Facsimile: 214-200-0853

R-59782.1

Certificate of Mailing

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope

L. Underwood

In place of PTO-1449 Form

MEET

U. S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

OF

Complete if Known

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

10/600,052 **Application Number** Filing Date June 20, 2003 Kelly, et al. Applicant(s) Art Unit 3738 Examiner Name Unknown

31132.129

U. S. PATENT DOCUMENTS

Attorney Docket Number

			U. S. PATENT DO	
Examiner's Initials	Cite No.	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document
mais (A1	2677369	05/1954	Knowles
	A2	3486505	12/30/1969	Morrison
	A3	3574374	04/13/1971	Keller, et al.
	A4	3875595	04/08/1975	Froning
	A5	3876728	04/08/1975	Stubstad
	A6	4023572	05/17/1977	Weigand, et al.
	A7	4116200	09/26/1978	Braun, et al.
	A8	4179810	12/25/1979	Kirsch
	A 9	4309777	01/12/1982	Patil
	A10	4349921	09/21/1982	Kuntz
	A11	4599086	07/1986	Doty
	A12	4645507	02/24/1987	Engelbrecht, et al.
	A13	4714469	12/22/1987	Kenna
	A14	4743256	05/10/1988	Brantigan
	A15	4757983	07/19/1988	Ray, et al.
	A16	4759766	07/26/1988	Buettner-Janz, et al.
	A17	4759769	07/26/1988	Hedman, et al.
	A18	4766328	08/23/1988	Yang
	A19	4777942	10/18/1988	Frey, et al.
	A20	4800639	01/31/1989	Frey, et al.
	A21	4834757	05/30/1989	Brantigan
	A22	4863476	09/05/1989	Shepperd
	A23	4863477	09/05/0989	Monson
	A24	4874389	10/17/1989	Downey
	A25	4878915	11/07/1989	Brantigan
	A26	4887595	12/19/1989	Heinig, et al.
	A27	4904260	02/27/1990	Ray, et al.
	A28	4904261	02/27/1990	Dove, et al.
<u> </u>	A29	4908032	03/13/1990	Keller
	A30	4908036	03/13/1990	Link, et al.
	A31	4911718	03/27/1990	Lee, et al.
	A32	4917704	04/17/1990	Frey, et al.
<u> </u>	A33	4932969	06/1990	Frey, et al.
	A34	4932975	06/12/1990	Main, et al.
	A35	4946378	08/07/1990	Hirayama, et al.
<u> </u>	A36	4955908	09/11/1990	Frey, et al.
J	A37	4978355	12/18/1990	Frey, et al.
	A38	4997432	03/05/1991	Keller
<u> </u>	A39	5002576	03/26/1991	Fuhrmann, et al.
<u> </u>	A40	5015247	05/14/1991	Michelson

Examiner Date Signature Considered EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not

Downey

Kuslich

Bao, et al.

Michelson

07/30/1991

09/10/1991

10/22/1991

10/22/1991

in conformance and not considered. Include a copy of this form with next communication to applicant.

A41

A42

A43

A44

5035716

5047055

5059193

5059194

In place of PTO-1449 Form

U. S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

OF

5

10/600, 052 Application Number June 20, 2003 Filing Date

Complete if Known

STATEMENT BY APPLICANT (use as many sheets as necessary)

2

INFORMATION DISCLOSURE

Applicant(s) Kelly, et al.

Art Unit 3738 Examiner Name Unknown

31132.129 Attorney Docket Number

U. S. PATENT DOCUMENTS

Examiner's Initials	Cite No.	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document		
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	A45	5062845	11/05/1991	Kuslich, et al.		
	A46	5071437	12/10/1991	Steffee		
	A47	5080662	01/14/1992	Paul		
	A48	5084048	01/28/1992	Jacob, et al.		
	A49	5108438	04/28/1992	Stone		
	A50	5122130	06/16/1992	Keller		
	A51	5123926	06/23/1992	Pisharodi Baumgartner		
	A52	5171280	12/15/1992			
	A53	5171281	12/15/1992	Parsons, et al.		
	A54	5176708	01/05/1993	Frey, et al.		
	A55	5192326	03/1993	Bao, et al.		
	A56	5192327	03/09/1993	Brantigan		
	A57	5234431	08/1993	Keller		
	A58	5236460	08/17/1993	Barber		
	A59	5246458	09/1993	Graham		
	A60	5258031	11/02/1993	Salib, et al.		
	A61	5261911	11/1993	Carl		
	A62	5261913	11/16/1993	Marnay		
	A63	5306308	04/26/1994	Gross, et al.		
	A64	5314477	05/24/1994	Marnay		
	A65	5314478	05/24/1994	Oka, et al.		
	A66	5320644	06/14/1994	Baumgartner		
	A67	5370697	12/1994	Baumigartner		
	A68	5383933	01/24/1995	Keller		
	A69	5401269	03/28/1995	BittnerJanz, et al.		
	A70	5403314	04/04/1995	Currier		
	A71	5425772	06/20/1995	Brantigan		
	A72	5425773	06/20/1995	Boyd, et al.		
	A73	5443514	08/22/1995	Steffee		
	A74	5456719	10/10/1995	Keller		
	A75	5458638	10/17/1995	Kuslich, et al.		
	A76	5458642	10/17/1995	Beer, et al.		
	A77	5484437	01/16/1996	Michelson		
	A78	5489307	02/06/1996	Kuslich, et al.		
	A79	5489308	02/06/1996	Kuslich, et al.		
	A80	5496318	03/05/1996	Howland, et al.		
	A81	5507816	04/16/1996	Bullivant		
	A82	5514180	05/07/1996	Heggeness, et al.		
	A83	5527315	06/18/1996	Jeanson, et al.		
	A84	5534028	07/09/1996	Bao, et al.		
	A85	5534029	07/1996	Shima		
	A86	5534090	07/1996	Navarro, et al.		
	A87	5545229	08/13/1996	Parsons, et al.		
	A88	5549679	08/1996	Kuslich		
	A89	5556431	09/17/1996	Buttner-Janz		
Examiner				Date		

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.

R-59781.1

Signature

Customer No. 27863

Considered

U. S. DEPARTMENT OF COMMERCE In place of PTO-1449 PATENT AND TRADEMARK OFFICE Form

3

STATEMENT BY APPLICANT INFORMATION DISCLOSURE

OF

5

	Complete if Known						
Application Numb	·						
Application Numb	X 54.3023(325) e						
Filing Date	June 20, 2003	·					
Applicant(s)	Kelly, et al.						
Art Unit	3738						
Examiner Name	Unknown	·					
Attorney Docket	Number 31132.129						

11 S	PΔ	TENT	DOC	IME	2TL

: Evamina da	Cite	Document Number	U. S. PAIENT DO	_		-(C)-4 D
Examiner's Initials	No.	Document Number	MM-DD-YYYY	Name or Hate	ntee of Applicant	of Cited Document
	A90	5562738	10/08/1996	Boyd, et al.		
	A91	5571189	11/1996	Kuslich	 	
	A92	5593409	01/14/1997	Michelson	· · ·	
	A93	5609636	03/11/1997	Kohrs, et al.		
	A94	5645598	07/08/1997	Brosnahan		
	A95	5649926	07/22/1997	Howland		
	A96	5658285	08/19/1997	Marnay, et al.		
	A97	5662158	09/02/1997	Caldarise		
	A98	5674294	10/07/1997	Bainville, et al.		· · · · · · · · · · · · · · · · · · ·
	A99	5674295	10/07/1997	Ray, et al.		.,
	A100	5674296	10/07/1997	Bryan, et al.		
	A101	5676701	10/1997	Yuan, et al.		
	A102	5683464	11/04/1997	Wagner, et al		
	A103	5702450	12/30/1997	Bisserie		
-	A104	5713899	02/03/1998	Marnay, et al.		
	A105	5716415	02/10/1998	Steffee		
	A106	5720748	02/24/1998	Kuslich, et al.		
	A107	5722977	03/03/1998	Wilhelmy		
	A108	5723013	03/03/1998	Jeanson, et al.		
	A109	5741253	04/21/1998	Michelson		
	A110	5782830	07/21/1998	Farris		
	A111	5782832	07/21/1998	Larsen, et al.		
	A112	5797909	08/25/1998	Michelson		
	A113	5824093	10/20/1998	Ray, et al.		
	A114	5824094	10/20/1998	Serhan, et al.		
-	A115	5865846	02/02/1999	Bryan, et al.		
	A116	5865848	02/02/1999	Baker		
	A117	5885300	03/23/1999	Tokuhashi, et al.	1	
	A118	5888197	03/30/1999	Mulac, et al.		 .
	A119	5888226	03/30/1999	Rogozinski		
-	A120	5897087	04/27/1999	Farley	·	
	A121	5902233	05/11/1999	Farley, et al.		
	A122	5928284	07/27/1999	Mehdizadeh		
	A123	5947971	09/07/1999	Kuslich, et al.		
	A124	5976187	11/02/1999	Richelsoph		
	A125	5984865	11/16/1999	Farley, et al.		
	A126	5989291	11/23/1999	Ralph, et al.		
	A127	6001130	12/14/1999	Bryan, et al.		
	A128	6017008	01/25/2000	Farley		
	A129	6022376	02/08/2000	Assell		
	A130	6033363	03/07/2000	Farley, et al.		
	A131	6059790	05/09/2000	Sand, et al.		
Examiner			'		Date	
Signature	1				Considered	

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.

R-59781.1 Customer No. 27863 In place of PTO-1449 PATENT AND TRADEMARK OFFICE Form

Application Number 10/600,052

INFORMATION DISCLOSURE Filing Date June 20, 2003

STATEMENT BY APPLICANT (use as many sheets as necessary)

Applicant(s) Bryan, et al.

Art Unit 3738

Examiner Name Unknown

INFORMATION DISCLOSURE				Filing Date June 20, 2003				
STA		NT BY APPLICAN	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Applicant(s) Bryan, et al.				
\$ 9 \(\frac{1}{4}\)		any sheets as necessary)		Art Unit 3738				
】 劇			Examin	Examiner Name Unknown				
TETET		4 OF	1,000 (300)	y Docket Number 31132.129				
(A)		. 1 . 1	·	**************************************				
<u> </u>			U. S. PATENT D	OCUMENTS				
Examiner's	Cite	Document Number	Publication Date		t of Cited Document			
Initials	No.	Dodniene (tamber	MM-DD-YYYY	Name of Fateritee of Applican	it di Cited Document			
	A132	6059829	05/09/2000	Schlapfer, et al.				
	A133	6063121	05/16/2000	Xavier, et al.				
	A134	6066174	05/23/2000	Farris				
	A135	6080155	06/27/2000	Michelson				
	A136	6083228	06/04/2000	Michelson				
	A137	6086595	07/11/2000	Yonemura, et al.				
	A138 A139	6096038	08/01/2000	Michelson				
	A139 A140	6139579 6156067	10/31/2000	Steffee, et al.				
	A140	6162252	12/05/2000 12/19/2000	Bryan, et al.				
<u> </u>	A141	6179874	01/30/2001	Kuras, et al. Cauthen				
	A143	6228022	05/08/2001	Friesem, et al.				
	A144	6228026	05/08/2001					
	A145	6231609	05/15/2001	Rull, et al. Mehdizadeh				
	A146	2002/0151901	10/17/2002	Bryan, et al.				
	<u> </u>		1	1 / /				
			FOREIGN PATENT	DOCUMENTS				
Examiner's	Cite	Foreign Patent	Publication Date	Patentee or Applicant of Cited	Translation			
Init0ials	No.	Document (Country Code – Number – Kind)	MM-DD-YYYY	Document	Y/N			
	B1	DE 2263842	07/1974	Hoffmann-Daimler	Yes			
	B2	DE 30 23 353 A1	04/09/1981	Sulzer AG				
	В3	DE 2804936	08/02/1979	Sulzer AG				
	B4	SU 895433	01/07/1982	Russian Patent	No			
	B5	EP 0176728	04/09/1986	Buttner-Janz, et al.	No			
	B6	DE 37 41 493 A1	06/22/1989	Roland Man Druckmasch				
<u> </u>	B7	SU 1560184	04/30/1990	Russian Paent	No			
	B8	Roll No. G 90 00 094.3	03/14/1991	Mecron Mediziniesche Produkte	Yes			
<u> </u>	B9	EP 0 560 140 A1	09/15/1993	Buttner-Janz	No			
	B10	DE 196 53 580	06/25/1998	Wolf				
	B11	WO 00/04839	02/03/2000	Nuvasive, Inc.				
	B12 B13	WO 00/04851 WO 00/13619	02/03/2000	Spinal Dynamics Corporation				
	B14	WO 00/13619	03/16/2000	Spinal Dynamics Corporation				
	B15	WO 02 11633	03/16/2000 02/14/2002	Spinal Dynamics Corporation Spinal Dynamics Corporation				
<u> </u>	010	110 02 11000	02/14/2002	Spirial Dynamics Corporation				
			OTHER PRI	OR ART				
Examiner's	Cite	Include name of the auth		TERS), title of the article, title of the iter	m date (nane/s) volume			
Initials			issue number(s), p	publisher, city/country where published				
		Brain, et al., "The Neurolo	gical Manifestations	of Cervical Spondylosis", Brain: A Jou	rnal of Neurology, vol. 75;			
	C1	Macmillan & Co.; 1952; pp		Charita Lumbar International Div. 5				
	C2	Orthopedics; vol. 13; 1989	echanics of the SB (); pp. 173-176.	Charite Lumbar Intervertebral Disc End	oprostnesis"; International			
	Edeland; "Some Additional Suggestions for an Intervertebral Disc Prosthesis"; Dept. of Occupational Health;							
	C3 Vdvo PV AB; S-40508; Goteborg; Sweden; 1985 Butterworth & Co. Publishers Ltd.							

Examiner	Date	
Signature	Considered	
	Considered	L

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.

In place of PTO-1449 Form			OF COMMERCE MARK OFFICE		Complete if Known
l				Application Number	10/600,052
	RMATION D			Filing Date	June 20, 2003
STAT!	EMENT BY	'APPL'	ICANT	Applicant(s)	Bryan, et al.
(use	e as many sheets	as necess	sary)	Art Unit	3738
(<u>\$</u>				Examiner Name	Unknown
SIET	5	OF	5	Attorney Docket Number	31132.129

L TOPE		OTHER PRIOR ART
Examiner's	Cite	Include name of the author (in CAPITAL LETTERS), title of the article, title of the item, date, page(s), volume-
Initials	No.	issue number(s), publisher, city/country where published
	C4	Enker et al.; "Artificial Disc Replacement"; Spine; vol. 18; No. 8; 1993; pp. 1061-1070.
		Hawkins, et al.; "Shear Stability of an Elastomeric Disk Spacer Within an Intervertebral Joint: A Parametric
	C5	Study"; Journal of Biomechanical Engineering Technical Briefs; vol. 114; Aug. 1992; pp. 414-415.
		Hedman, et al.; "Design of an Intevertebral Disc Prosthesis"; Spine; vol. 17; No. 6; 1991; pp. S256-S260.
	C6	Hellier, et al.; "Wear Studies for Development of an Intervertebral Disc Prosthesis"; Spine; vol. 17; No. 6
	C7	Supplement; 1992; S86-S96.
		Hood; "Far Lateral Lumbar Disc Herniations"; Neurosurgery Clinics of North America; vol. 4, No. 1; Jan. 1993;
	. C8	pp. 117-124.
	C9	Langrana, et al.; "Finite-Element Modeling of the Synthetic Intervertebral Disc"; Spine; vol. 16; No. 6: 1991; pp. S245-S252.
	C10	Lee, et al.; "Development of a Prosthetic Intervertebral Disc"; Spine; vol. 16; No. 6; 1991; pp. S253-S255.
	C11	Lees, et al.; "Natural History & Prognosis of Cervical Spondylosis"; British Medical Journal; Dec. 28, 1963; British Medical Association, London, England; Copyright 1963; pp. 1607-1610.
	C12	Long; "Failed Back Surgery Syndrome"; Neurosurgery Clinics of North America; vol. 2, No. 4; Oct. 1991; pp. 899-919.
:	C13	Ray; "The Artificial Disc-Introduction, History and Socioeconomics"; Clinical Efficacy and Outcome in the Diagnosis and Treatment of Low Back Pain; Raven Press, Ltd., NY; 1992; pp. 205-280.
	C14	Robinson, et al.; "The Results of Anterior Interbody Fusion of the Cervical Spine"; The Journal of Bone & Joint Surgery; vol. 44-A, No. 8, Dec. 1962; pp. 1569-1587.
	C15	Simeone and Rothman; "Cervical Disc Disease"; Pennsylvania Hospital & University of Pennsylvania; 1975; pp. 387-433.
	C16	Solini, et al.; "Metal Cementless Prosthesis for Vertebral Body Replacement of Metastatic Malignant Disease of the Cervical Spine"; Journal of Spinal Disorders; vol. 2; No. 4; 1989; pp. 254-262.
	C17	Taylor, Collier; "The Occurrence of Optic Neuritis in Lesions of the Spinal Cord, Injury, Tumor, Melitis"; Brain: A Journal of Neurology; vol. 24; Macmillian & Co. Ltd, 1901; pp. 532-550.
	C18	Tie-sheng, et al.; "Lumbar Intervertebral Disc Prosthesis"; Chinese Medical Journal. 104-(5); 1991; pp. 381-386.
	C19	Artificial Disc, Market Potential and Technology update, Viscogliosi Bros., LLC, February 2000, pp. 1-65.
	C20	Boning-Up, The Musculoskeletal Healthcare Industry, Industry Commentary & Review of 1999, Viscogliosi Bros., LLC., March 10, 2000, pp. 1-33.
	C21	Bryan Total Cervical Disc Prosthesis, Single Level Surgical Technique Manual, SPINAL Dynamics Corporation, 2000, 01080-004, pp. 29
	C22	Morphology of the Human Skeleton, pp. 268-270; 283-291; 315-331; 489-495.
	C23	Spine Industry Dynamics, Viscogliosi Bros., LLC., March 10, 2000, pp. 1-4.
	,	

Examiner	Date	
Signature	Considered	

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.